

[illegible][illegible]

PUI  
VO4

```

LL          IIIIII      SSSSSSSS
LL          IIIIII      SSSSSSSS
LL          II         SS
LL          II         SS
LL          II         SS
LL          II         SS
LL          II         SSSSSS
LL          II         SSSSSS
LL          II         SS
LL          II         SS
LL          II         SS
LL          II         SS
LLLLLLLLLLL IIIIIIII   SSSSSSSS
LLLLLLLLLLL IIIIIIII   SSSSSSSS

```

PATABLES  
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16-SEP-1984 01:07:58 VAX/VMS Macro V04-00

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DEFINITIONS  
DRIVER PROLOGUE TABLE  
DRIVER DISPATCH TABLE  
FUNCTION DECISION TABLE

PU  
VO

```
0000 1 .TITLE PATABLES.
0000 2 .IDENT 'V04-000'
0000 3
0000 4 *****
0000 5
0000 6 *
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0000 24 *
0000 25 *****
0000 26
0000 27 ++
0000 28
0000 29 FACILITY:
0000 30
0000 31 VAX/VMS EXECUTIVE, I/O DRIVERS
0000 32
0000 33 ABSTRACT: THIS MODULE CONTAINS THE DRIVER PROLOGUE TABLE,
0000 34 DRIVER DISPATCH TABLE, AND FUNCTION DECISION TABLE.
0000 35
0000 36 AUTHOR: N. KRONENBERG, JUNE 1981
0000 37
0000 38 MODIFIED BY:
0000 39
0000 40 V03-006 NPK3057 N. Kronenberg 23-Jul-1984
0000 41 Change retry count from 10. to 50.
0000 42
0000 43 V03-005 NPK3029 N. Kronenberg 22-Jul-1983
0000 44 Change retry count from 3 to 10.
0000 45
0000 46 V03-004 KTA3046 Kerbey T. Altmann 03-Apr-1983
0000 47 Add $DEVDEF and $SSDEF.
0000 48
0000 49 V03-003 ROW0099 Ralph O. Weber 8-JUN-1982
0000 50 Add error log buffer size and register dump routine entries
0000 51 in the DDTAB macro.
0000 52 This change will be in a new driver image shipped in V3.1.
0000 53
0000 54 V03-002 NPK2019 N. Kronenberg 6-Apr-1982
0000 55 Make start I/O routine return ill function code instead
0000 56 of bugcheck.
0000 57
```

PATABLES  
V04-000

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5-SEP-1984 00:17:04

VAX/VMS Macro V04-00  
[DRIVER.SRC]PATABLES.MAR;1

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0000 58 :  
0000 59 :  
0000 60 :  
0000 61 :--

V03-001 NPK2016  
Fixed .TITLE

N. Kronenberg

18-Mar-1982

DEFINITIONS

```

0000 63      .SBTTL  DEFINITIONS
0000 64
0000 65
0000 66  ::
0000 67  :: System definitions (LIB.MLB):
0000 68  ::
0000 69
0000 70      $CRBDEF      ;Channel Request Block offsets
0000 71      $DCDEF      ;Device type codes
0000 72      $DDBDEF     ;Device Data Block offsets
0000 73      $DEVDEF     ;Device definitions
0000 74      $DPTDEF     ;Driver Prologue Table offsets
0000 75      $DYNDEF     ;Dynamic block types
0000 76      $IPLDEF     ;IPL definitions
0000 77      $PDTDEF     ;Port Descriptor Table offsets
0000 78      $UCBDEF     ;Unit Control Block offsets
0000 79      $SSDEF      ;System service success codes
0000 80      $VECDEF     ;CRB transfer vector blk offsets
0000 81
0000 82  ::
0000 83  :: PADRIVER definitions (PALIB.MLB):
0000 84  ::
0000 85
0000 86      $PAPDTDEF    ;CI extension to PDT
0000 87      $PAREGDEF   ;CI port register definitions
0000 88      $PAUCBDEF   ;CI extension to UCB
0000 89

```

## DRIVER PROLOGUE TABLE

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```

0000 91 .SBTTL DRIVER PROLOGUE TABLE
0000 92
0000 93 DPTAB END=PA$END,- ;End of driver label
0000 94 ADAPTER=CI,- ;Adapter type
0000 95 UCBSIZE=UCB$C_PASIZE,- ;UCB size
0000 96 NAME=PADRIVER,- ;Driver name
0000 97 FLAGS=<DPT$M_SCS!DPT$M_NOUNLOAD> ;Driver requires SCS load
0038 98 ; and cannot be reloaded
0038 99
0038 100 DPT_STORE INIT
0038 101
0038 102 DPT_STORE UCB,UCB$B_FIPL,B,IPL$SCS ;Fork IPL
003C 103
003C 104 DPT_STORE UCB,UCB$C_DEVCHAR,L,<- ;Device characteristics:
003C 105 DEV$M_SHRT,- ;Sharable
003C 106 DEV$M_AVL,- ;Available
003C 107 DEV$M_ELGL,- ;Error logging device
003C 108 DEV$M_IDV,- ;Input device
003C 109 DEV$M_ODV> ;Output device
0043 110
0043 111 DPT_STORE UCB,UCB$B_DIPL,B,20 ;Device interrupt IPL
0047 112 DPT_STORE UCB,UCB$B_DEVCLASS,B,- ;Device class =
0047 113 DCS_BUS ;bus
004B 114 DPT_STORE UCB,UCB$B_ERTMAX,B,50 ;Retry count is 50 times
004F 115 DPT_STORE UCB,UCB$B_ERTCNT,B,50 ; without reboot of system
0053 116
0053 117 DPT_STORE REINIT
0053 118
0053 119 DPT_STORE DDB,DDB$C_DDT,D,PA$DDT ;DDT address
0058 120 DPT_STORE CRB,CRB$C_INTD+4,- ;Interrupt routine addr
0058 121 D,PA$INT
005D 122 DPT_STORE CRB,CRB$C_INTD+VEC$C_INITIAL,-
005D 123 D,PA$CTINIT ;Controller init addr
0062 124 DPT_STORE CRB,CRB$C_INTD+VEC$C_UNITINIT,-
0062 125 D,PA$UNITINIT ;Unit init addr
0067 126 DPT_STORE CRB,CRB$C_TOUTROUT,- ;Periodic wake up routine
0067 127 D,CNF$TIMER
006C 128 DPT_STORE END

```

DRIVER DISPATCH TABLE

```

0000 130 .SBTTL DRIVER DISPATCH TABLE
0000 131
0000 132
0000 133 DDTAB DEVNAM=PA,-
0000 134 START=FATAL_QIO,-
0000 135 FUNCTB=PA$FUNCTIONTABLE,-
0000 136 UNITINIT=PA$UNITINIT,-
0000 137 ERLGBF=ELOG$K_BYTES,-
0000 138 REGDMP=ELOG$REGDUMP
0000 139
0038 140
0038 141 ;
0038 142 ; No START I/O's possible:
0038 143 ;
0038 144
0038 145 FATAL_QIO:
0038 146
50 00F4 8F 3C 0038 147 MOVZWL #SS$_ILLIOFUNC,R0
51 D4 003D 148 CLRL R1
003F 149 REQCOM
; QIO's are illegal temporarily
; Function decision table
; Unit init routine addr
; Size of the error log buffer
; (for device attention errors)
; Register dump rout. addr.
; If ever get here, then
; return error to caller
; QIO

```

FUNCTION DECISION TABLE

```
0045 151 .SBTTL FUNCTION DECISION TABLE
0045 152
0045 153 PASFUNCTIONTABLE:
0045 154
0045 155 FUNCTAB <-
0045 156 <>
004D 157
004D 158 FUNCTAB <-
004D 159 <>
0055 160
0055 161
0055 162
0055 163
0055 164
0055 165 .END
```

```
;Valid functions:
;None at present
;Buffered functions:
```

PATABLES  
Symbol table

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```

$$$                = 00000020 R    02
$$$CURSIZ          = 000001C4
$$$NEWSIZ          = 000001D0
$$OP               = 00000002
ATS CI             = 00000004
CNF$TIMER          ***** X    02
CRBSL_INTD         = 00000024
CRBSL_TOUTROUT     = 0000001C
DCS_BOS            = 00000080
DDBSL_DDT          = 0000000C
DEVSM_AVL          = 00040000
DEVSM_ELG          = 00400000
DEVSM_IDV          = 04000000
DEVSM_ODV          = 08000000
DEVSM_SHR          = 00010000
DPTSC_LENGTH       = 00000038
DPTSC_VERSION      = 00000004
DPT$INITAB         = 00000038 R    02
DPTSM_NOUNLOAD     = 00000004
DPTSM_SCS          = 00000008
DPT$REINITAB       = 00000053 R    02
DPT$TAB            = 00000000 R    02
DYN$C_CRB          = 00000005
DYN$C_DDB          = 00000006
DYN$C_DPT          = 0000001E
DYN$C_UCB          = 00000010
ELOG$R_BYTES       ***** X    03
ELOG$REGDUMP       ***** X    03
FATAL_QIO          = 00000038 R    03
FUNCTAB_LEN        = 00000010
IOCSMNTVER         ***** X    03
IOCSREQCOM         ***** X    03
IOCSRETURN         ***** X    03
IPL$SCS            = 00000008
MASKR              = 00000000
MASKL              = 00000000
PASCTLINIT         ***** X    02
PASDDT             = 00000000 RG   03
PASEND             ***** X    02
PASFUNCTABLE       = 00000045 R    03
PASINT             ***** X    02
PASUNITINIT        ***** X    02
PA_CNF             = 00000000
PA_CQ0             = 00000908
PA_CQ1             = 0000090C
PA_CQ2             = 00000910
PA_CQ3             = 00000914
PA_DFQ             = 00000928
PA_MADR            = 00000014
PA_MDATR           = 00000018
PA_MFQ             = 0000092C
PA_MTC             = 00000930
PA_MTEC            = 00000934
PA_PDC             = 00000920
PA_PEC             = 0000091C
PA_PESR            = 0000093C
PA_PFAR            = 00000938

```

```

PA_PIC             00000924
PA_PMC             00000004
PA_PPR             00000940
PA_PQBBR           00000904
PA_PS              00000900
PA_PSR             00000918
PDT$B_DQIMAP       00000154
PDT$B_HSHUT DG     00000180
PDT$B_MAX_PORT     0000017C
PDT$B_NXT_PORT     0000017E
PDT$B_P0_LBSTS     00000180
PDT$B_P1_LBSTS     00000181
PDT$B_PLOGMAP      00000134
PDT$B_PORTMAP      00000114
PDT$B_PORT_NUM     0000017D
PDT$B_REQIDPS      = 0000017F
PDT$C_LENGTH       = 000000E4
PDT$C_PAREGBASE    = 000000E4
PDT$C_PAREGEND     = 00000110
PDT$C_PQB          = 000001E0
PDT$C_CNF          = 000000E4
PDT$C_CQ0          = 000000F0
PDT$C_CQ1          = 000000F4
PDT$C_DFQ          = 000000FC
PDT$C_DFQHQR       00000208
PDT$C_DGHDRSZ      00000190
PDT$C_DGNETHD      00000194
PDT$C_DQELOGOUT    000002E0
PDT$C_GPTBASE      0000022C
PDT$C_GPTLEN       00000230
PDT$C_LBDG         00000184
PDT$C_MFQ          00000100
PDT$C_MFQHQR       0000020C
PDT$C_MQELOGOUT    00000320
PDT$C_MTC          00000104
PDT$C_PFAR         00000108
PDT$C_PMC          000000E8
PDT$C_POLLERDUE    0000018C
PDT$C_POOLDUE      00000188
PDT$C_PPR          0000010C
PDT$C_PS           000000EC
PDT$C_PSR          000000F8
PDT$C_SPTBASE      00000224
PDT$C_SPTLEN       00000228
PDT$C_VBDT         0000021C
PDT$C_VPQB         00000218
PDT$Q_COMQ2        000001F0
PDT$Q_COMQ3        000001F8
PDT$Q_COMQBASE     000001E0
PDT$Q_COMQH        000001E8
PDT$Q_COMQL        000001E0
PDT$Q_DFREQ        000001D0
PDT$Q_FORMPB       00000174
PDT$Q_MFREQ        000001D8
PDT$Q_RSPQ         00000200
PDT$Q_TEMP_RSPQ    0000019C
PDT$W_BDTLEN       00000220

```

PATABLES  
Symbol table

PDT\$W_DQELN	00000210
PDT\$W_LPRT STS	00000110
PDT\$W_MQELN	00000214
PDT\$W_PBCOUNT	00000112
PDT\$W_STDGDYN	00000198
PDT\$W_STDGUSED	0000019A
SIZ...	= 00000001
SS\$_ILLIOFUNC	= 000000F4
UCB\$B_DEVCLASS	= 00000040
UCB\$B_DIPL	= 0000005E
UCB\$B_ERTCNT	= 00000080
UCB\$B_ERTMAX	= 00000081
UCB\$B_FIPL	= 0000000B
UCB\$B_LMERTCNT	000000D2
UCB\$B_LMERTMAX	000000D3
UCB\$B_LMEST	000000D0
UCB\$B_LMET	000000D1
UCB\$C_PASIZE	= 000001B4
UCB\$K_ERRDGBYTS	= 000000B4
UCB\$K_LMPKTBYTS	= 00000040
UCB\$L_CICMD	000000F0
UCB\$L_DEVCHAR	= 00000038
UCB\$L_DPC	= 0000009C
UCB\$L_MSGFKBLK	000000A0
UCB\$N_LSADDR	000000D8
UCB\$N_LSID	000000DE
UCB\$N_RSADDR	000000E4
UCB\$N_RSID	000000EA
UCB\$T_MSGDATA	000000F8
UCB\$T_OPAO TEMP	000000B8
UCB\$W_LMERRCNT	000000D4
UCB\$W_MSGBYTCNT	000000F4
UCB\$W_MSGPPDTYP	000000F6
VECSL_INITIAL	= 0000000C
VECSL_UNITINIT	= 00000018

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+-----+  
! Psect synopsis !  
+-----+

PSECT name	Allocation	PSECT No.	Attributes														
. ABS .	00000000 ( 0.)	00 ( 0.)	NOPIC USR	CON	ABS	LCL	NOSHR	NOEXE	NORD	NOWRT	NOVEC	BYTE					
\$AB\$\$	00000944 ( 2372.)	01 ( 1.)	NOPIC USR	CON	ABS	LCL	NOSHR	EXE	RD	WRT	NOVEC	BYTE					
\$\$\$105_PROLOGUE	0000006D ( 109.)	02 ( 2.)	NOPIC USR	CON	REL	LCL	NOSHR	EXE	RD	WRT	NOVEC	BYTE					
\$\$\$115_DRIVER	00000055 ( 85.)	03 ( 3.)	NOPIC USR	CON	REL	LCL	NOSHR	EXE	RD	WRT	NOVEC	LONG					

+-----+  
! Performance indicators !  
+-----+

Phase	Page faults	CPU Time	Elapsed Time
Initialization	35	00:00:00.07	00:00:00.34
Command processing	133	00:00:00.50	00:00:04.46
Pass 1	418	00:00:11.75	00:00:38.66
Symbol table sort	0	00:00:01.67	00:00:04.79

PATABLES  
VAX-11 Macro Run Statistics

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Pass 2	48	00:00:01.75	00:00:05.63
Symbol table output	18	00:00:00.10	00:00:00.23
Psect synopsis output	2	00:00:00.02	00:00:00.02
Cross-reference output	0	00:00:00.00	00:00:00.00
Assembler run totals	656	00:00:15.87	00:00:54.13

The working set limit was 1650 pages.

91602 bytes (179 pages) of virtual memory were used to buffer the intermediate code.

There were 90 pages of symbol table space allocated to hold 1619 non-local and 0 local symbols.

165 source lines were read in Pass 1, producing 15 object records in Pass 2.

31 pages of virtual memory were used to define 27 macros.

-----  
! Macro library statistics !  
-----

Macro library name	Macros defined
-----	-----
\$255\$DUA28:[DRIVER.OBJ]PALIB.MLB;1	3
\$255\$DUA28:[SYS.OBJ]LIB.MLB;1	14
\$255\$DUA28:[SYSLIB]STARLET.MLB;2	8
TOTALS (all libraries)	25

1981 GETS were required to define 25 macros.

There were no errors, warnings or information messages.

MACRO/LIS=LISS:PATABLES/OBJ=OBJ\$:PATABLES MSRC\$:PATABLES/UPDATE=(ENH\$:PATABLES)+EXECML\$/LIB+LIB\$:PALIB.MLB/LIB

0115 AH-BT13A-SE  
VAX/VMS V4.0

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